

ABSTRACT

An improved precision video gauging machine system for measuring a workpiece that includes a base structure that has mounted on it a carriage for supporting the workpiece that is to be measured. The carriage is vertically movable with respect to the base and carries the workpiece with it. A column, which is horizontally movable with respect to the base structure, has a video based coordinate measuring system mounted on it. Such a video based coordinate measuring system would include a video camera that produces a video signal having a first optical axis and a focal plane where an image of the workpiece to be measured is focused. The camera is mounted to move horizontally with respect to the workpiece to be measured and generates an image in the form of a plurality of pixels. A video monitor that is responsive to the video signal is connected to the video camera and displays an image of the workpiece being on the focal plane for an operator to measure.